

REMARKS/ARGUMENTS

Claims 1-4 and 6-19 are pending in this application. Claims 1-4 and 6-19 stand rejected. Claims 1-4 and 6-19 stand rejected. By this Amendment, claims 1 and 14 have been amended. The amendments made to claims 1 and 14 have been made to improve the form thereof. In light of the amendments and remarks set forth below, Applicant respectfully submits that each of the pending claims is in immediate condition for allowance.

Claim 14 is rejected under 35 U.S.C. §112 for a minor informality. Claim 14 is amended to address the antecedent basis issue noted by the Examiner. Withdrawal of the rejection is therefore requested.

Claims 1-3 stand rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 6,152,688 ("Staab") and claims 4-11, 15, and 16 stand rejected under 35 USC §103(a) as being unpatentable over Staab. Applicant requests reconsideration and withdrawal of these rejections.

Among the limitations of independent claim 1 not present in Staab is

outlet ducts connected to the partially annular ducts, the rings of the blade chambers and the partially annular ducts forming a radially inner delivery chamber and a radially outer delivery chamber, and a connecting duct connecting the radially outer delivery chamber to a radially inner delivery chamber configured so that fuel flows from the radially outer delivery chamber to the radially inner delivery chamber, connections of the connecting duct connect to the radial inner and the radial outer delivery chambers, the connections being laid out so that at a rated speed of the impeller a same pressure prevails on both connections.

Among the limitations of independent claim 15 not present in Staab is "a connecting duct connecting the radial outer delivery chamber to the radial inner delivery chamber, wherein fuel is delivered from the radial outer delivery chamber to the radial inner delivery chamber when pressure in the radial inner chamber falls."

As recited in claims 1 and 15 there is a radial inner delivery chamber and a radial outer delivery chamber. These two delivery chambers are connected via a connecting duct. As shown in Figure 2 of the present application, a connecting duct 29 connects inner and outer radial delivery chambers 21 and 22. Further, as disclosed and claimed, the fuel flows from the outer delivery chamber to the inner delivery chamber. The Examiner asserts this feature is shown in Figure 3 of Staab. Applicant respectfully disagrees with this interpretation of Staab.

In Staab, overflow 14 connects an end of delivery channel 12 with input chamber 11. Staab discloses only one delivery channel 12, in contrast to the two delivery channels recited in claim 1. Further, overflow 14 connects delivery channel 12 to a feed chamber 11. In contrast, the claimed connecting duct is connected between inner and outer delivery chambers.

The Examiner further asserts that the connecting duct and its explicitly recited function is disclosed in Staab at col. 4, ll. 27-31. Applicant disagrees with this interpretation of Staab. While Staab discloses that due to the connection to each other of vane chambers 15, 17 lying opposite to each other, the liquid to be conveyed can flow approximately free of eddy from the one conveyor chamber 22 into the other conveyor chamber 21. However, the flow in the overflow chamber 14 is disclosed as being conducted by the impeller wheel 7 to the start of the overflow channel 14. Further, the overflow channel 14 terminates opposite inlet 8, i.e., at the outer channel. Thus, if the overflow terminates at the outer channel and the fluid is conducted to the start of the overflow channel, the fluid flows from the inner to the outer channel, opposite the claimed direction of flow.

Thus, for at least these reasons, independent claims 1 and 15 are allowable over Staab.

Further, claim 1 recites "the connections being laid out so that at a rated speed of the impeller a same pressure prevails on both connections." Due to there being less space between the radial inner and outer ducts, the connecting duct is designed to directly connect the radial inner and

outer ducts. The pressure increases with the length of the duct. Thus, typically, the pressure in an inner duct is always lower than in an outer duct because of a shorter length of the inner duct. For this reason a short connecting duct leads to a pressure difference between the connections of inner and outer ducts. The disadvantage of pressure difference is avoided by the connections being laid out so that at a rated speed of the impeller a same pressure prevails on both connections. For this additional reason, claim 1 is allowable.

Dependent claims 2-11 depend from, and contain all the limitations of claim 1. Dependent claim 16 depends from and contains all the limitations of claim 15. These dependent claims also recite additional limitations which, in combination with the limitations of claim 1 or claim 15, are neither disclosed nor suggested by Staab and are also directed towards patentable subject matter. Thus, claims 2-11 and 15 should also be allowed.

Claim 12, 17, and 19 stand rejected under 35 USC §103(a) as being anticipated by U.S. Patent Application 2004/0211396 ("Burhenne"). We recommend requesting a reconsideration and withdrawal of the rejection.

Among the limitations of claim 12 not present in Burhenne is "a radially outer delivery chamber that is connected to the internal combustion engine, and a radially inner delivery chamber that is connected to a jet pump arranged inside the fuel tank".

As discussed above, there are two explicitly recited delivery chambers. These two chambers are shown in Figure 2 of the present application as inner and outer radial delivery chambers 21 and 22. In contrast, in Burhenne, the chamber connected to the jet pump is a feed chamber, not a delivery chamber. In fact, like Staab, Burhenne only discloses a single delivery chamber. As such, Burhenne does not disclose the above-recited limitation.

Dependent claims 13-14 and 17-19 depend from, and contains all of the limitations of claim 12. These dependent claims also recite additional limitations which, in combination with the limitations of claim 12, are neither disclosed nor suggested by Staab and are directed towards patentable subject matter. Thus, claims 13-14 and 17-19 should also be allowed.

It is believed that no fees or charges are required at this time in connection with the present application. However, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,
COHEN PONTANI LIEBERMAN & PAVANE LLP

By /Alfred W. Froebrich/
Alfred W. Froebrich
Reg. No. 38,887
551 Fifth Avenue, Suite 1210
New York, New York 10176
(212) 687-2770

Dated: July 24, 2009